

21st Century Blitzkrieg: The Marine Corps and the Revolution in Military Affairs

AWS 2002

Subject Area Topical Issues

**21ST CENTURY BLITZKRIEG:
THE MARINE CORPS AND THE REVOLUTION IN MILITARY AFFAIRS**

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4 February 2002
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Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 2002		2. REPORT TYPE		3. DATES COVERED 00-00-2002 to 00-00-2002	
4. TITLE AND SUBTITLE 21st Century Blitzkrieg: The Marine Corps and the Revolution in Military Affairs				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) United States Marine Corps, Command and Staff College, Marine Corps University, 2076 South Street, Marine Corps Combat Development Command, Quantico, VA, 22134-5068				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 13	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

Rest assured, if properly exploited and integrated into military organizations, tactics, and concepts of operations, these technical trends can soon add up to a revolution in military affairs that will constitute the greatest advances in warfare since the advent of the blitzkrieg and aircraft carriers in the 1930s and the nuclear weapon in the 1940s.
–Michael O’Hanlon, “Technological Change and the Future of Warfare”

Never in our history as a nation have we been faced with a more deviant threat than the one that became apparent on September 11, 2001. Indeed, terrorism in many ways is even more daunting than past enemies due to the elusive nature of the enemy and its seemingly unimaginable callousness for the lives of non-combatants. In the past our government has created large land armies, navies and air forces to deal with conventional enemies. Are those organizations capable of adapting their weapons and doctrine to this new threat? At the dawn of a new millennium, we find ourselves in the enviable position to rethink our allocation of resources, and our way of thinking toward the next generation of weapon systems and doctrine that will defend our future interests. Therefore, by understanding the concepts of the Revolution in Military Affairs (RMA), which exploits the current administration’s initiative on skipping a generation in weapons development, the Marine Corps will be better able to develop core technologies in the 21st century.

At the conclusion of the Gulf War, most military experts agreed that the U.S. Armed Forces needed to restructure their organizations and streamline procurement in order to function in the cash strapped recession that followed the conflict. As reported by the Project on Defense Alternatives, the 90’s were a period in which several revolutions (strategic, technological and economic) emerged which shaped our direction in doctrine development. Yet, for all the talk of a revolution, the Department of Defense remains a monolithic system, which has made little actual progress in military reform over the past ten years.

However, since the 1997 Quadrennial Defense Review and the former Chairman of the Joint Chiefs Of Staff, General John Shalikashvili's Joint Vision 2010, a new term and definition has been issued to try and restart this seemingly sluggish project. The Revolution in Military Affairs (RMA) is a concept that focuses the Armed Forces on the goal of achieving, within 10 years of the 21st century, possession of “**dominant battle field knowledge**,” “**full-dimensional protection**,” “**dominant maneuver**,” and “**precision strike**” ability from over the horizon (O’Hanlon 2). According to Andrew Marshall, Director of the Office of Net Assessments in the Office of the Secretary of Defense, "a Revolution in Military Affairs is a major change in the nature of warfare brought about by the innovative application of new technologies which, combined with dramatic changes in military doctrine and operational and organizational concepts, fundamentally alters the character and conduct of military operations." (Defense Association National Network 1) The basis of this concept is two fold, focusing on both technology and innovative thinking. Technologically, the following four tenants attempt to describe how future breakthroughs will change the face of the modern battlefield:

- First, improvements in computers and electronics will make possible major advances in weapons and warfare – most notable in areas such as information processing and information networks.
 - Second, sensors will become radically more capable, in effect making the battlefield “transparent.”
 - Third, conventional ground equipment will become drastically lighter, more fuel efficient, faster and more stealthy, making combat forces far more rapidly deployable and lethal once deployed.
 - Fourth, new types of weapons- such as space weapons, directed energy beams, and advanced biological agents- will be developed and widely deployed.
- (O’Hanlon 2)

These four pillars will act as the catalyst for RMA, which will:

- either render *obsolete* or *irrelevant* one or more core competencies of a dominant player
- -or *create* one or more new core competencies, in some new dimension of warfare
- -or both. (Hundley 9)

There are those among the armed forces that disagree with this type of revolution and will continue to pursue methods that have been proven in the past. Indeed, there are several military projects currently in the works that base their premise on legacy technologies. These projects may be entrenched too deeply within the Pentagon's bureaucracy to defeat, but that does not mean that RMA cannot occur. Because thinking is not tied to any future budgetary proposal, we as professionals can continue to develop tactics and techniques that will utilize whatever equipment we have to defeat the enemy. For example, during and immediately after the First World War, forward-thinking military officers such as Colonel J.F.C. Fuller of the British Army and Major Earl Ellis of the US Marine Corps outlined the basic features of armored warfare and amphibious warfare, at a time when both of their parent nations were recovering from the economic effects of World War I. (McKittrick et al. 47). Amazingly, these visionaries defined these concepts decades before the necessary systems existed and at a time when the political circumstances of the next war were uncertain. Additionally, from a weapons development standpoint, "at least one major development in weaponry contributed centrally to each of the ten major military revolutions since 1300"(O'Hanlon 6). The following are some examples of more notable RMA's extracted from Richard Hundley's "Past Revolutions, Future Transformations":

RMAs: SOME ILLUSTRATIVE EXAMPLES

RMA	NATURE OF PARADIGM SHIFT	CORE COMPETENCY AFFECTED	DOMINANT PLAYER AFFECTED
CARRIER WARFARE	Created new operational and tactical level model for naval warfare	Accurate naval gunfire of battleship fleets (rendered obsolete)	Battleship fleets (U.S. and British)
BLITZKRIEG	Created new operational and tactical level model for land warfare	Static Defense of prepared positions by infantry and artillery (rendered irrelevant)	French Army
ICBM	Created new dimension of warfare (intercontinental strategic warfare)	Long-range, accurate delivery of high-yield nuclear weapons (a new core competency)	
MACHINE GUN	Created new tactical level model for land warfare	Ability to maneuver massed infantry forces in the open (rendered obsolete)	All armies employing massed infantry forces in the open.
Longbow	Created new tactical level model for land warfare	Man-to-man combat capability of knights on horseback (rendered obsolete)	French armored cavalry

However some in the military feel towards change the future may well have already been decided for the pundits in the form of governmental change. Upon taking office in 2001, it became apparent the current administration was not satisfied with the progress the Pentagon had made toward reforming. Therefore, in May 2001, President Bush launched the largest new initiative in military thinking and the most costly weapons refit in American history. The basis of this initiative is to skip a generation in military technology in order to develop systems that our future foes cannot keep pace with. This concept is based on the fact that weapons development has become slower, while the pace of technology has risen. Secretary of Defense Donald Rumsfeld stated, “These opposing trends are ill suited for meeting the expansion of the 21st century asymmetrical threats and pervasive proliferation” (Mann 23). Therefore, the inability for weapons development to keep pace with technology “conspire to create a situation where it is difficult for the acquisition process to produce anything other than capabilities that are already a generation behind when deployed” (Mann 23). However, the Department of

Defense is quick to point out that skipping a generation in technology does not mean approaching the problem in a singular future leaning mindset. For example, existing platforms can continue being upgraded with new information systems that lend relevance to current situations. Indeed, the Service Life Extension Program (SLEP) has extended the careers of many of our most effective weapons systems, most notably the venerable B-52 bomber, a veteran of almost 50 years with no end to its service in sight.

Since this initiative was announced and the inception of RMA the U.S. has become embroiled in a new type of war with international terrorism. This war has highlighted the abilities of the U.S. Armed Forces and the weapon systems we currently employ. However, this conflict does not change the fact that we are currently faced with a recession that will eventually catch up to the armed forces. Some economists feel that the current wartime economic footing could stimulate the economy well into the future. They point to the economic stimulus this country endured from its involvement in World War II, a prosperity that we continue to feel today. Yet, there are those that feel just the opposite from this new type of war, they state “that the [war] the U.S. will be fighting against terrorism is not a traditional war, where tanks and airplanes are manufactured at a rapid pace, as in World War II”(Mieszkowski, Salon.com). Therefore, there will be little “manufacturing and economic growth stemming directly from the war effort” (Mieszkowski, Salon.com). Indeed, there are those that feel even stronger about the effects these types of wars have on the economy of not just the U.S. but also the West as a whole. They point out that “localized conflicts and periods of heightened military tension since 1945 have been anything but good for western economies, with any short-

term benefits from higher defense spending outweighed by dearer energy, higher inflation and lower consumer confidence” (Denny/Elliot, *The Guardian*). On 4 February of 2002 President Bush will send his 2003 budget requests to Congress. Included in this package is \$379 billion for defense, which constitutes a 14% increase from 2002 and will be the biggest boost to defense spending since the Regan administration (Stone/Moniz, *USA Today*). However, history shows that this type of spending, like its predecessor in the 1980’s, cannot sustain itself past the lifespan of the conflict faced. Indeed, after the collapse of the Soviet Union and an end to the Cold War, the defense budget was the victim of the newly won peace. So how will the current and post-war budgetary effects change the Marine Corps stance on weapons and tactical development? In order to continue to offer the citizens of this nation a relevant fighting force the Marine Corps must embrace RMA and promote three of its key components: doctrine, technology and organization.

In order to incorporate doctrine, technology and organization into a successful RMA, the Marine Corps will need to understand that these ideals are not stand-alone concepts. Each of these ideals will need to be incorporated into a synergistic approach that supports one another in its goal. For example, the German Army of World War II did not just develop the doctrine of blitzkrieg it developed the technology (tanks, dive bombers, two-way radios) and the organizational infrastructure (the Panzer Division) to implement the technology in battle (Hundley 15). It is this type of forward thinking that must be emphasized by future planners in the Marine Corps. Currently, the Navy and Marine Corps have begun reshaping the doctrine of the naval forces, which is outlined in

the visionary philosophy Operational Maneuver From the Sea (OMFTS). This philosophy goes far beyond traditional amphibious operations at the shoreline. Instead, the services envision operations that pierce deep into the inland regions of the world's coastlines, up to 200 miles inland in some cases. Using information technology and advanced weapons in concert with maneuver from the sea, the services will strike swiftly and decisively while minimizing risk to friendly forces. The technology that supports this doctrine is the so-called "amphibious triad": the MV-22 Osprey tilt rotor, the Landing Craft, Air-Cushioned (LCAC), and the Advanced Amphibious Assault Vehicle (AAAV). These three systems represent more than just useful weapons. Each leg of the triad works with the other two in a synergistic approach to warfare for maximum power, flexibility and survivability. The organizational structure will continue to utilize the Marine Air ground Task Force (MAGTF) in its several manifestations. This system allows the Marine Commander to tailor flexible packages of men and material for contingency operations and is readily adaptable to OMFTS.

However well adapted the Marine Corps currently is, or will be in the future to asymmetrical threats will be based on what it does today. The development of OMFTS, the triad of weapons, and the current organization will only be as relevant as the crisis they are faced with. Therefore, in order for the Marine Corps to remain relevant within our national defense structure it must continue the tradition of groundbreaking thinking and development it has become renowned for. First, it must spurn its Marines, from the junior private to the senior commander, to continue to challenge the operational concepts we implement. For example, if we take a look at the structure of a Marine rifle company we would find it virtually unchanged in form from that of its predecessor in the Vietnam

War. Yet, the weapons capability, information technology, and basic technical understanding of its Marines are far greater than that of the Vietnam Era model. Does this mean that the structure developed well over thirty years ago is still relevant, or that we as leaders have failed to undertake changes to concepts we take for granted?

Second, we must strive to streamline the procurement process of the systems we develop in order to allow those concepts to be relevant for the time span and geopolitical situation they were developed to deal with. It is difficult to understand how a country that could develop and implement the Norden bombsight in World War II, a device that revolutionized precision bombing, in the span of three years from the time of inception, now takes decades to develop weapon system at least as complicated as that in terms of technical parity. In fact:

We've never shortened cycle time, and it's gotten continuously longer over the last 30 years. Why? A combination of bureaucratic rigidities in the acquisition system, an excess of bureaucratic intervention in the process of [weapons] development and partially budgetary limitations. It is no longer, if it ever was, the result of seeking to get the last 10% of capability on a system (Mann 23).

This lesson not only affects the ability of Marines to train and fight to the doctrine being taught, but also affects the morale of those very same Marines who feel that they are learning techniques that may never be applied to the systems they were meant to support over the span of their career. Several thoughts on how to deal better with this problem, which plagues the entire Department of Defense, are in the concept phase. One idea the Army is looking into is becoming a venture capitalist in order to fund its future research and development. In this scenario, the Army would literally become a financial source for start-up and emerging companies that have a concept, a plausible market and a

business plan but lack the resources necessary to develop and market their ideas (Rand.com).

If there is any doubt that a revolution in military affairs is taking place in the culture of our government all one needs to do is analyze the administration's latest increase to the 2003 defense budget. On 31 January 2002, Secretary Rumsfeld announced that he would be seeking an additional \$9 billion to the defense budget in order to fund advanced state of the art weaponry systems. Below is a summary of those systems:

- Intelligence and communications. At least \$3 billion to improve intelligence gathering and computer networking.
- Unmanned aerial vehicles (UAVs), several \$100 million toward missile firing predator drones, speeding up production of Global Hawk, and step up research and development of stealthy bomb-dropping UAV.
- Army future combat systems. Slated to make the tank obsolete, this combination of sensors, robots, and remotely fired artillery would get more than \$500 million.
- Space-based radar. Officials have given top priority to developing a constellation of satellites that would track moving vehicles on the ground as well as aircraft (Stone/Moniz, USA Today).

These initiatives all but mirror those core competencies of a successful RMA program that were outlined earlier in this document.

The Marine Corps has prided itself on its initiative, innovation, and ability to adapt to an ever changing world for well over 200 years. However, we are now on the precipice of a time when the intelligent application of our resources and knowledge can lead us well ahead of any potential foe in the near future. The choice is ours; we can either continue to develop systems based on legacy technology, while maintaining the status quo of parity with the other nations of the world, or we can envision and develop

technology that will ensure our technical edge for decades to come. By embracing and promoting the ideal of RMA, in this economically unstable environment, we can assure that the revolution we fight in the military currently will be as successful as those that laid the groundwork for modern warfare as we know it today.

Notes:

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